MIAMI-DADE COUNTY
PRODUCT CONTROL
SECTION
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DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

Viridian Systems, Inc.
3847 Crum Road
Youngstown, OH 44515

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Viridian Modified Bitumen Roofing Systems over Lightweight Concrete Decks.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA No. 14-0626.18 and consists of pages 1 through 23.
The submitted documentation was reviewed by Alex Tigera.

ROOFING SYSTEM APPROVAL

Category:	Roofing
Sub-Category:	Modified Bitumen
Material:	SBS
Deck Type:	Lightweight Insulating Concrete
Maximum Design Pressure:	-410 psf.

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
Vented Base G (TG)	39” x 49’ (1.5 sq.)	ASTM D6163	Fiberglass reinforced, modified bitumen membrane with 1” wide factory applied heat weldable strips on back side.
Vented Base P (TG)	39” x 33’ (1 sq.)	ASTM D6164	Polyester reinforced, modified bitumen membrane with 1” wide factory applied heat weld strips on back side.
Pika Ply SS-3G	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Pika Ply 2.2 (FS)	39" x 49' (1.5 sq.)	ASTM D6163	Glass reinforced modified bitumen membrane with a plastic burn-off film for heat weld bonding to the top side. Applied in hot asphalt, cold adhesive or ribbon stripping.
Pika Ply SS-3G (TG)	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Pika Ply Base (TG)	39" x 49' (1.5 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane covered on both sides with a plastic burn-off film. Applied by heat welding.
Pika Ply 180 (S)	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Pika Ply 180 (FS)	39" x 49' (1.5 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a sanded bottom and a plastic burn-off film on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Premium Cap Sheet	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants, sanded on the bottom and mineral granules on the top. Applied in hot asphalt, cold adhesive or ribbon stripping.
Pika Ply MS-4G (TG)	39" x 33' (1 sq.)	ASTM D6163	Fiberglass reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
			by heat welding.
Pika Ply SS-3P	39" x 33' (1 sq.) 39” x 26’ (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Pika Ply SS-4	39" x 33' (1 sq.) 39” x 26’ (¾ sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane sanded on both sides. Applied in hot asphalt, cold adhesive or ribbon stripping.
Pika Ply 180 (SF) 3.5	39” x 33’ (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a plastic burn-off film on the bottom and sanded on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Secure Ply (S)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Secure Ply (F)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Secure Ply X (TG)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane. Applied by mechanical attachment.
Secure Ply	39” x 33’ (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 4-inch or 5-inch wide side lap with a plastic burn-off film on the bottom and sanded on the top. Applied by mechanical attachment. Lap heat welded or sealed with an approved cold adhesive.
Secure Ply E (MF)	39” x 33’ (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with a 5-inch wide side lap with a self-adhering compound and release film and sanded on the bottom and top surfaces. Applied by mechanical attachment. Lap self-adhered or sealed with approved cold adhesive.
Pika Ply SS-3P (TG)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Pika Ply 250 S (TG)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced SBS modified bitumen membrane, both sides covered with a plastic burn-off film. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Performance Ply MS	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

TABLE 1

Product	Dimensions	Test Specification	Product Description
FR			membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Pika Ply MS-4	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a sanded bottom and a mineral granules top. Applied in hot asphalt, cold applied adhesive or ribbon stripping (after removal of plastic burn-off film).
Pika Ply MS-4 (TG)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Pika Ply 250 GR FR (TG)	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants a plastic burn-off film on the bottom and mineral granules on the top. Applied by heat welding or ribbon stripping (after removal of plastic burn-off film).
Pika Ply Aluminum	various	ASTM D6298	Fiberglass reinforced modified bitumen sheeting faced with aluminum foil. Applied by heat welding of ribbon stripping (after removal of plastic burn-off film).
Solarflect (TG)	39” x 33’ (1 sq.)	ASTM D6162	Polyester reinforced SBS modified bitumen membrane with a plastic burn-off film on the bottom side and a reflective white top surface. Applied by heat welding.
Solarflect	39” x 33’ (1 sq.)	ASTM D6162	Stabilized polyester mat reinforced SBS modified bitumen membrane with a sanded bottom side and a reflective white top surface. Applied by hot asphalt or cold adhesive.
Permagard Capsheet	39" x 33' (1 sq.)	ASTM D6164	Non-woven polyester reinforced modified bitumen membrane with fire retardants and surfaced with mineral granules. Applied by mechanical attachment, heat welding or ribbon stripping (after removal of plastic burn-off film).

APPROVED INSULATIONS:

TABLE 2

Product Name	Product Description	Manufacturer (With Current NOA)
SECUROCK Gypsum-Fiber Roof Board	Gypsum board	USG Corp.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
1.	Tri-Fix Fastening System	Fastening system for base sheet attachment to lightweight concrete, gypsum or cementitious wood fiber decks.	3" diameter plate with various length fasteners	W.H. Maze Company
2.	Dekfast 12, 14 & 15 HS	Insulation fastener	Various	SFS Intec, Inc.
3.	Twin Loc-Nails	Base ply fastening systems for lightweight concrete, gypsum or cementitious wood fiber decks	Various	Altenloh, Brinck & Co. U.S., Inc.
4.	Trufast FM-90 Base Sheet Fastener	Base ply fastening systems for lightweight concrete decks		Altenloh, Brinck & Co. U.S., Inc.
5.	CR Assembled Base Sheet Fastener (1.2") or (1.7")	Base ply fastening assembly		OMG, Inc.
6.	Twin Loc-nails (no plate) Base Sheet Fastener with Straight Line Batten Bar	Batten bar		Altenloh, Brinck & Co. U.S., Inc.
7.	Polymer Batten Strip	Modified polymer batten bar		OMG, Inc.
8.	OMG Heavy Duty	Insulation fastener	Various	OMG, Inc.
9.	Dekfast Galvalume Steel 3" Round	Galvalume AZ50 steel plate	3" round	SFS Intec, Inc.
10.	Dekfast Coiled Batten Strip	Batten bar		SFS Intec, Inc.
11.	Trufast 3" Metal Insulation Plate	Galvalume steel plate	3" round	Altenloh, Brinck & Co. U.S., Inc.
12.	Trufast #14 HD Fastener	Insulation fastener fro wood, steel and concrete	Various	Altenloh, Brinck & Co. U.S., Inc.
13.	Dekfast Galvalume Steel Round 2-3/8" 20 ga. Barbed plates	Galvalume AZ55 steel barbed plate	2.37" Round	SFS Intec, Inc.
14.	Dekfast Galvalume Steel Hex	Galvalume steel plate	2 7/8" x 3 ¼"	SFS Intec, Inc.
15.	OMG XHD	Insulation fastener	Various	OMG, Inc.

APPROVED FASTENERS:

TABLE 3

Fastener Number	Product Name	Product Description	Dimensions	Manufacturer (With Current NOA)
16.	OMG 3" Galvalume Steel Plate	Galvalume stress plate	3" round	OMG, Inc.

APPROVED SURFACING/COATING OPTIONS:

TABLE 4

Chosen components must be applied according to manufacturer's application instructions. Any coating, listed below, used as a surfacing, must be listed within a current NOA.

System Number	Manufacturer	Application
1.	Generic	Flood coat and gravel/slag with an application rate of 60 lbs./sq. & 400 lbs./sq., respectively.
2.	Karnak Corporation	Karnak #97 Fibered Aluminum Roof Coating applied at an application rate of 1.5 gal./sq.
3.	Thermo Manufacturing Systems, LLC	Super Prep Roof Coating applied in two coats at an application rate of 1.5 gal./sq./coat.
4.	Quest Construction Products LLC dba United Coatings	Roof Mate Coating, applied in one base coat at a rate of 1.5 gal./sq., and one finish coat at a rate of 1.5 gal./sq.
5.	Insulating Coatings Corporation	Astec 2000 Finish Coat applied in two base coats at a rate of 0.75 gal./sq./coat and two finish coats at a rate of 0.75 gal./sq./coat.
6.	Henry Company	HE280DC White Elastomeric Roof Coating applied in two coats at an application rate of 1 gal./sq./coat.
7.	National Coating Corp.	Acryshield® A500 applied in two coats at an application rate of 1 gal./sq./coat.
8.	Soprema, Inc.	R-Nova Roof Coating
9.	Generic	Semi-ceramic coated colored granules.

EVIDENCE SUBMITTED:

Test Agency/Identifier	Name	Report	Date
Atlantic & Caribbean Roof Consulting	ACRC 03-008	TAS 114	07/11/03
Underwriters Laboratories	R11436	UL 790	06/18/13
Factory Mutual Research Corporation	0PA2.AM	FM 4470	11/29/89
	2P2A7.AM	FM 4470	11/29/89
	1W8A1.AM	FM 4470	07/15/93
	1Z3A6.AM	FM 4470	04/27/95
	152A1.AM	FM 4470	11/28/84
	2D0A0.AM	FM 4470	08/15/97
	2B8A4.AM	FM 4470	07/02/97
	3001334	FM 4470	01/25/00
	3002351	FM 4470	02/28/03
	3014614	FM 4470	02/27/06
	3023749	FM 4470	09/28/06
	3029098	FM 4470	10/25/07
	3032109	FM 4470	07/21/08
	3045101	FM 4470	11/05/12
	3017614	FM 4470	02/27/06
	3022038	FM 4470	04/05/06
	3025185	FM 4470	05/22/07
	3047439	FM 4470	07/22/13
	3047351	FM 4470	10/09/14
	3044801	FM 4470	02/27/12
	3024594	FM 4470	05/19/06
	3025185	FM 4470	05/22/07
	3045734	FM 4470	04/04/12
Dynatech Engineering Corp.	10.94.27	TAS 114	10/27/94
	2491-04.95	TAS 114	01/04/95
Exterior Research & Design, LLC.	2003.02.97-1	TAS 114	02/15/97
	2003-2.04.97-1	TAS 114	04/15/97
	2002.07.97-1	TAS 114	08/15/97
	2716.05.98-1	TAS 114	05/11/98
	2109.08.02	TAS 114	08/06/02
	2766.12.03	TAS 114	12/01/03
	2760.12.04-R1	TAS 114	12/23/04
Trinity|ERD	S12370.03.09-1	ASTM D6164	03/06/09
	S12370.03.09-2	ASTM D6164	03/06/09
	S12370.03.09-3	ASTM D6162	03/06/09
	S11440.06.10	ASTM D4798/TAS 110	06/01/10
	S32840.06.10-R1	TAS 117 (B)	12/11/14
	S11440.01.11-R1	ASTM D6164	06/07/12
	S11440.11.10-4	ASTM D2178	11/17/10
	S11440.11.10-3-R1	ASTM D4601	01/30/13
	S11440.12.10-1-R1	ASTM D6163	06/07/12

	S32700.12.10-R2	ASTM D6162	07/07/14
	S35860.12.11-1-R1	ASTM D2178	12/12/14
	S35860.12.11-2	ASTM D4601	12/12/11
	S35860.05.12-1-R2	ASTM D6163	03/14/13
Trinity | ERD	S35860.05.12-2-R3	ASTM D6164	08/28/14
	S43400.08.14-5	ASTM D6163	08/26/14
	S43400.08.14-6	ASTM D6164	08/26/14
	S43400.08.14-7-R1	ASTM D6164	11/20/14
	S43400.09.14-9	ASTM D6164	09/02/14
	S43400.09.14-10	ASTM D6298	09/08/14
	S45010.02.14	ASTM D6506	02/07/14
	S43400.08.14-4-R1	ASTM D6163	10/24/14
	S44110.09.14-3	ASTM D6163	09/08/14
	S44110.09.14-7C	ASTM D6164	09/02/14
	S44220.09.14-1	ASTM D6162	09/08/14
	S44220.09.14-7A	ASTM D4601	09/08/14
	S11440.11.10-3-R2	ASTM D4601/TAS 117(B)	08/26/14
	S43210.11.14	ASTM D1876	11/20/14
	S35860.05.12-3	ASTM D6164	05/08/12
	S35860.09.12-R2	ASTM D6163	12/12/14
	M45560.10.13-1-R2	ASTM D4897/TAS 117	12/11/14
	S39970.07.12-2	ASTM D6164	07/12/12
	S39970.07.12-R1	ASTM D6162	12/12/14
PRI Construction Materials Technologies, LLC	SOP-049-02-01	ASTM D1644/D2196	05/31/12
	SOP-043-02-01	ASTM D4601	02/27/12
	SOP-042-02-01	ASTM D4601	02/27/12
	SOP-041-02-01	ASTM D2178	02/27/12
	SOP-040-02-01	ASTM D2178	02/27/12
	SOP-010-02-01.03	TAS-138	07/26/11
	SOP-012-02-01	TAS 114-J	08/29/11
	SOP-012-02-02	TAS 114-J	05/08/12
	SOP-050-02-01	ASTM D3019	07/12/12
	SOP-056-02-01	Physical Properties	09/12/12
Certified Testing Laboratories	CTLA 101R	TAS 114-J	09/23/08
	CTLA 101R-A	TAS 114-J	09/23/08

DECK STRESS ANALYSIS CALCULATIONS/REPORTS

Engineer/Agency	Identifier	Assemblies	Date
Robert Nieminen, P.E.	Signed/Sealed Calculations	E(8), E(9), E(10)	02/10/16
Factory Mutual Research Corp.	RoofNav Listings	E(1), E(3), E(4), E(5), E(6)	02/10/16

APPROVED ASSEMBLIES:

Membrane Type: SBS

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Mearlcrete Lightweight Insulting Concrete, Min. 200 psi, wet cast density 40 pcf, min. 2" thick top coat. Over 1/8" slurry and an optional minimum 1" thick EPS Holey Board. Cast over structural concrete or steel deck.

System Type E(1): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck: Minimum 22 ga., Grade 33, Type BV steel decking attached to supports spaced 5' o.c. maximum using 5/8" puddle welds (every bottom flute). Steel deck side laps are attached with three Traxx 1 #10 evenly spaced between supports or structural concrete deck.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

Base Sheet: One layer of Secure Ply (S)*, Secure Ply (F)*, Secure Ply X (TG)*, Secure Ply or Secure Ply E (MF) fastened to the deck as described below.
*Requires torch-applied ply membrane.

Fastening #1: Attach base sheet using Tri-Fix Fastening System spaced 9" o.c. in a 5" lap. The side lap fastener row is encapsulated in the torch-applied lap.

(Maximum Design Pressure –45 psf. See General Limitation #7.)

Fastening #2: Attach base sheet using Tri-Fix Fastening System spaced 8" o.c. in a 5" lap and 8" o.c. in one center row. The side lap fastener row is encapsulated in the torch-applied lap and the center row is stripped-in with a min. 6" wide strip of torch-applied membrane.

(Maximum Design Pressure –67.5 psf. See General Limitation #7.)

Ply Sheet: (Optional) Pika Ply SS-3G (TG)*, Pika Ply Base (TG)*, Sopralene Flam 180*, Pika Ply 250 S (TG)*, Pika Ply 180 (SF) 3.5, torch-applied.

Membrane: Pika Ply MS-4G (TG), Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, torch-applied.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.

Maximum Design Pressure: See Fastening Requirements above.

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Elastizell Range II Cellular Lightweight Insulating Concrete, Min. 160 psi, min. 2½" thick top coat. Over 1/8" slurry and an optional minimum 2" thick EPS Holey Board. Cast over structural concrete.
System Type E(2):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Structural concrete deck.
Base Sheet:	One layer of Secure Ply (S)*, Secure Ply (F)*, Secure Ply X (TG)*, Secure Ply or Secure Ply E (MF) fastened to the deck as described below. *Requires torch-applied ply membrane.
Fastening:	Attach base sheet using Tri-Fix Fastening System spaced 8" o.c. in a 5" lap and 8" o.c. in one center row. The side lap fastener row is encapsulated in the torch-applied lap and the center row is stripped-in with a min. 6" wide strip of torch-applied membrane.
Ply Sheet: (Optional)	Pika Ply SS-3G (TG)*, Pika Ply Base (TG)*, Sopralene Flam 180*, Pika Ply 250 S (TG)*, Pika Ply 180 (SF) 3.5, torch-applied.
Membrane:	Pika Ply MS-4G (TG), Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, , torch-applied.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.
Maximum Design Pressure:	–67.5 psf. See General Limitation #7.)

Membrane Type: SBS

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Mearlcrete Lightweight Insulating Concrete, min. 200 psi, wet cast density 40 pcf, min. 2" thick top coat. Over 1/8" slurry and an optional minimum 1" thick EPS Holey Board.

System Type E(3): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck: Minimum 22 ga., Grade 33, Type BV steel decking attached to support spaced at 5' o.c. maximum using 3/8" puddle welds with washer (every bottom flute). Steel deck side laps are attached three Traxx 1 #10 evenly spaced between supports or structural concrete deck.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

Base Sheet: One layer of Secure Ply, Secure Ply E (MF), Secure Ply (S), Secure Ply (F)* or Secure Ply X (TG)* fastened to the deck as described below:
*Requires torch-applied cap membrane.

Fastening #1: Attach base sheet using Tri-Fix Fasteners spaced 9" o.c. in a 5" lap. The side lap fastener row is encapsulated in the torch-applied lap.

(Maximum Design Pressure –45 psf. See General Limitation #7.)

Fastening #2: Attach base sheet using Tri-Fix Fasteners spaced 8" o.c. in a 5" lap and 8" o.c. in one center rows. The side lap fastener row is encapsulated in the torch-applied lap and the center row is stripped-in with an 8" wide strip of torch applied membrane.

(Maximum Design Pressure –67.5 psf. See General Limitation #7.)

Ply Sheet: (Optional) Pika Ply SS-3G (TG)*, Pika Ply Base (TG)*, Sopralene Flam 180*, Pika Ply 250 S (TG)*, Pika Ply 180 (SF) 3.5, torch-applied.
*Requires torch-applied cap membrane.

Membrane: Pika Ply MS-4G (TG), Elastophene Flam FR+GR, Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, , torch-applied.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.

Maximum Design Pressure: See Fastening Requirements above

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore HS Cellular Concrete; minimum wet cast density of 38 lbs./ft^3, 350 psi, over 18-22 ga steel decking or structural concrete deck.
System Type E(4):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga., Grade 33, Type B steel decking attached to supports spaced maximum 6' o.c. using 0.5" puddle welds and washers 6" o.c. Steel deck side laps are attached with three Traxx/1 fasteners spaced maximum 12" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
LWC Deck:	Celcore HS Cellular Concrete with a minimum wet cast density of 38 lbs./ft^3, minimum 2" thick top coat. Over a minimum 1" thick EPS Holey Board.
LWC Deck Preparation:	Celcore PVA Curing Compound spray applied to lightweight concrete at a rate of 0.33 gal./sq.
Base Sheet:	Secure Ply, Secure Ply (S), Secure Ply (F), Secure Ply X (TG) or Secure Ply E (MF) mechanically attached through lightweight concrete to steel decking with Dekfast Galvalume Steel Round 2-3/8" 20-Ga Barbed Plates and Dekfast 15 HS fasteners space maximum 12" o.c. through minimum 5" wide laps and maximum 12" o.c. in one central row in the field. A minimum 6" wide strip of Pika Ply SS-3P (TG) is torch-applied over field fasteners.
Ply Sheet: (Optional)	Pika Ply SS-3G (TG), Pika Ply Base (TG), Pika Ply SS-3P (TG)*, Pika Ply 180 (SF) 3.5, Secure Ply, Pika Ply 250 S (TG), torch-applied.
Membrane:	Pika Ply MS-4G (TG), Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, , torch-applied with minimum 3" wide laps.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.
Maximum Design Pressure:	-60 psf. (See General Limitation #7.)

Membrane Type: SBS

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore MF Cellular Concrete; min. wet cast density of 38 lbs./ft^3, min. 350 psi, over 18-22 ga steel decking or structural concrete.

System Type E(5): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck: Structural concrete or 18-22 ga., Grade 33, Type B steel deck installed and welded to minimum 0.25 in. thick steel structural supports spaced maximum 6' o.c. using 3/8" diameter weld washers 6" o.c. at each bearing. The deck side laps are fastened at 30" o.c. using Traxx/1 fasteners.
This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.

Thermal Barrier: (Optional) (*With steel deck only*) Min. 0.625-inch SECUROCK Gypsum-Fiber Roof Board mechanically attached with OMG Heavy-Duty fasteners and OMG 3" Galvalume Steel Plates at 1.6 ft^2.

Vapor Barrier: (Optional) Pika Ply 180 (SF) 3.5, torch-applied over substrate primed with ASTM D41 primer.

LWC Deck: Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". The Celcore HS admixture was added to the mixture during the mixing process at a rate of 3.4 fl. oz. per 100 lbs. of cement. Minimum 1" thick Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq. and allowed to dry for 48 hours.

Base Sheet: Pika Ply 180 (S), Pika Ply SS-3G, Secure Ply, mechanically attached with Trufast FM-90 Base Sheet Fasteners spaced 9" o.c. at the 4" laps and 12" o.c. in two equally spaced, staggered rows.
*Requires asphalt applied or cold applied ply sheets.

Ply Sheet: (Optional) Pika Ply SS-3G (TG)*, Pika Ply Base (TG)*, Pika Ply SS-3P (TG)*, Pika Ply 180 (SF) 3.5, Pika Ply 250 S (TG)*, torch-applied with minimum 3" wide lap.

Membrane: Pika Ply MS-4G (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Solarflect (TG), Pika Ply Aluminum, , torch-applied with minimum 3" wide lap.

Or

Premium Cap Sheet, Solarflect, Performance Ply MS FR, Pika Ply MS-4, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq. to sand surfaced ply membrane.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.

Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Membrane Type: SBS

Deck Type 4: Lightweight Concrete, Non-Insulated

Deck Description: Celcore MF Cellular Concrete; minimum wet cast density of 38 lbs./ft^3, minimum 350 psi, over 18-22 ga steel decking

System Type E(6): Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck: 18-22 ga., Grade 33, Type B vented or non-vented galvanized steel deck installed and welded to minimum 0.25 in. thick steel structural supports spaced maximum 6' o.c. using 3/8" diameter weld washers 6" o.c. at each bearing. The deck side laps are fastened at 24" o.c. (three evenly spaced fasteners between supports) using Teks 1 or Traxx/1 fasteners between supports. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**

LWC Deck: Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". The Celcore HS admixture was added to the mixture during the mixing process at a rate of 3.4 fl. oz. per 100 lbs. of cement. Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3.

LWC Deck Preparation: After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq.

Base Sheet: Pika Ply 180 (S), Pika Ply SS-3G, Secure Ply, mechanically attached with Trufast FM-90 Base Sheet Fasteners spaced 7" o.c. at the 3" laps and 7" o.c. in two equally spaced, staggered rows.
*Requires asphalt applied or cold applied ply sheets.

Ply Sheet: Pika Ply SS-3G (TG), Pika Ply Base (TG), Pika Ply SS-3P (TG), Pika Ply 180 (SF) 3.5, Pika Ply 250 S (TG), torch-applied with minimum 3" wide lap.

Or

Pika Ply 2.2 (FS)*, Pika Ply SS-3G, Pika Ply 180 (S), Pika Ply 180 (FS)*, Pika Ply SS-3P, Pika Ply SS-4, adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq.

*Requires torch-applied cap membrane.

Membrane: Pika Ply MS-4G (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Solarflect (TG), Pika Ply Aluminum, , torch-applied with minimum 3" wide lap.

Surfacing: Surfacing is Optional on granular surfaced field cap membranes.
Surfacing is Required for smooth or sanded surfaced field cap membranes.
Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications.
Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.

Maximum Design Pressure: -60 psf. (See General Limitation #7)

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Mearlcrete Lightweight Insulting Concrete, wet cast density 35 pcf, min. 200 psi, with optional 1" EPS board embedded in 1/8" slurry. Min. 2" thick top coat.
System Type E(7):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	2500 psi, structural concrete deck.
Vapor Barrier: (Optional)	UL or FM approved asphaltic vapor retarder may be installed over the deck.
Base Sheet:	One layer of Secure Ply fastened to the deck as described below:
Fastening:	Attach base sheet using Tri-Fix Fasteners spaced 8" o.c. in 5" side laps and 8" o.c. in one center row. The side laps are torch-applied and the center row is covered with a 6" wide strip of Secure Ply.
Ply Sheet: (Optional)	Pika Ply SS-3G (TG), Pika Ply Base (TG), Secure Ply (F), Secure Ply (S), Secure Ply X (TG) or Pika Ply 180 (SF) 3.5, Pika Ply SS-3P (TG), Pika Ply 250 S (TG), torch-applied.
Membrane:	Pika Ply MS-4G (TG), Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, torch-applied
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.
Maximum Design Pressure:	-75 psf. (See Limitation #7)

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete; min. 340 psi, wet cast density of 38-42 lbs/ft^3.
System Type E(8):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Structural concrete deck or 18-22 ga., Grade 33, steel deck Type B, BV attached to supports spaced maximum 6' o.c. using welds through weld washers at the bottom of each corrugation. The deck panel side laps are fastened 24" o.c. (three evenly spaced fasteners between supports) using ITW-Buildex fasteners between the deck supports. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
LWC Deck:	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a min. 340 psi, filling the corrugation with a minimum depth of 1/8". Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38-42 lbs./ft^3. After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.5 gal./sq.
Base Sheet:	Secure Ply (S), Secure Ply (F) or Secure Ply X (TG) mechanically attached through LWC into steel decking, perpendicular to the direction of the steel decking with Dekfast Coiled Batten Strip placed center within a 3" wide lap. The bars are secured using OMG XHD spaced 12" o.c. with a row in the field of the sheet with Dekfast Coiled Batten Strips and OMG XHD Fasteners fasteners spaced 12" o.c. Apply a 6" wide strip of Secure Ply (S) torch-applied over the exposed center row of fasteners.
Ply Sheet (Optional):	Pika Ply 180 (SF) 3.5, Pika Ply SS-3G (TG), Pika Ply Base (TG), Pika Ply SS-3P (TG), Pika Ply 250 S (TG) or Pika Ply 250 S (TG), torch-applied with minimum 3" wide lap.
Membrane:	Pika Ply MS-4G (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Solarflect (TG), Pika Ply Aluminum, torch-applied with minimum 3" wide lap.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.
Maximum Design Pressure:	-90 psf. (See General Limitation #7.)

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Concrecel Lightweight Concrete, min. 140 psi. cast over deck with 1" EPS board embedded in 1/8" slurry. Followed by 3" top coat of Concrecel Lightweight Concrete.
System Type E(9):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	Minimum 22 ga. Type B, Grade 33 vented steel decking washed with a weak acid solution attached to supports spaced 6' o.c. using 5/8" puddle welds spaced 6" o.c. Steel deck side laps are attached with #1/4-14 x 7/8", DP1, HWH self-drilling screws with ¼" washers evenly spaced 12" o.c. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
Base Sheet:	One layer of Secure Ply (S), Secure Ply (F), Secure Ply X (TG) fastened to the deck as described below:
Fastening:	Attach base sheet using ES Products Low Pro Batten Bar, Trufast #15 EHD Fasteners, with spaced 6" o.c. in a 4" lap.
Ply Sheet	None
Membrane:	Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Solarflect (TG), Pika Ply Aluminum, torch-applied with minimum 3" wide lap.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.
Maximum Design Pressure:	-82.5 psf. (See General Limitation #7.)

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore MF Cellular Concrete; minimum wet cast density of 38-42 lbs.ft/3, min. 340 psi, over 18-22 ga steel decking or structural concrete deck.
System Type E(10):	Base sheet mechanically fastened to substrate.

All General and System Limitations apply.

Structural Deck:	18-22 ga., Grade 33, steel deck type B, BV attached to supports spaced max. 5' o.c. using ITW Buildex Driller Screw fasteners with nickel plated washers spaced maximum 6" o.c. Steel deck side laps are attached with ITW Buildex Driller Screw fasteners spaced maximum 12" o.c. or structural concrete deck. **This Tested Assembly has been analyzed for allowable deck stress. See Evidence Submitted Table.**
LWC Deck:	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38-42 lbs./ft^3, filling the corrugation with a minimum depth of 1/8". Minimum 1" thick Insulfoam EPS Holey Boards are then immediately placed in a brick-like pattern into the wet concrete and is allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38-42 lbs./ft^3.
LWC Deck Preparation:	After an overnight set, Celcore PVA Curing Compound is spray applied to lightweight concrete at a rate of 0.5 gal./sq.
Base Sheet:	One layer of Secure Ply (S), Secure Ply (F) or Secure Ply X (TG) mechanically attached through LWC into steel decking, perpendicular to the direction of the steel decking with Dekfast Coiled Batten Strips and OMG XHD fasteners or SFS Dekfast #15 HS spaced in the following pattern: 6" x 12" x 6", repeated until end of batten is reached, within a torch-applied minimum 3" side lap and one row in the field of the sheet with Dekfast Coiled Batten Strips and OMG XHD Fasteners or SFS Dekfast #15 HS spaced 12" o.c. Apply a 6" wide strip of Secure Ply (S) torch-applied over the exposed center row of fasteners.
Ply Sheet (Optional):	Pika Ply SS-3G (TG), Pika Ply Base (TG), Pika Ply SS-3P (TG), Pika Ply 250 S (TG), torch-applied with minimum 3" wide lap.
Membrane:	Pika Ply MS-4G (TG), Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, torch-applied with minimum 3" wide lap.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above or any Miami-Dade approved coating system.
Maximum Design Pressure:	-135 psf. (See General Limitation #7.)

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore Cellular Lightweight Insulating Concrete, Min. 300 psi, min. wet cast density of 38 lbs./ft^3, over structural concrete deck.
System Type F(1):	Base sheet adhered to substrate

All General and System Limitations apply.

Primer: (Optional)	Primed with an ASTM D41 primer at a rate of ¾ to 1 gal./sq.
LWC Deck:	Celcore MF Cellular Concrete with Celcore HS Rheology Modifying Admixture with a minimum wet cast density of 38 lbs./ft^3, with a minimum depth of 1/8". The Celcore HS admixture was added to the mixture during the mixing process at a rate of 3.4 fl. oz. per 100 lbs. of cement. Minimum 1" thick Holey Boards are then immediately placed into wet LWC and allowed to set overnight. The following day, a minimum 2" thick topping layer of Celcore MF Cellular Concrete with Celocre HS Rheology Modifying Admixture is placed atop the EPS at a wet cast density of 38 lbs./ft^3.
LWC Deck Preparation:	After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq.
Base Sheet:	One layer of Vented Base G (TG), Vented Base P (TG), torch-applied to primed lightweight concrete.
Ply Sheet:	Pika Ply SS-3G (TG), Pika Ply Base (TG), Pika Ply SS-3P (TG), Pika Ply 180 (SF) 3.5 or Pika Ply 250 S (TG), torch-applied.
Membrane:	Pika Ply MS-4G (TG), Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), Pika Ply Aluminum, torch-applied.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.
Maximum Design Pressure:	-187.5 psf. (See General Limitation #9.) -410 psf. with primed concrete substrate. (See General Limitation #9.)

Membrane Type:	SBS
Deck Type 4:	Lightweight Concrete, Non-Insulated
Deck Description:	Celcore Cellular Lightweight Insulating Concrete, Min. 300 psi over structural concrete deck.
System Type F(2):	Base sheet adhered to substrate

All General and System Limitations apply.

Primer:	Structural concrete deck primed with ASTM D41 primer.
Vapor Barrier: (Optional)	One layer of Pika Ply 180 (SF) 3.5, Secure Ply, torch-applied. Or One layer of Pika Ply SS-3G, Pika Ply 180 (S), Pika Ply SS-3P or Pika Ply SS-4 adhered in hot asphalt at 25 lbs./sq.
LWC Deck:	Celcore HS Cellular Concrete with a minimum wet cast density of 38 lbs./ft^3, with a minimum depth of 1/8". Minimum 1" thick EPS Holey Board placed into wet LWC. The following day a minimum 2" thick top of Celcore HS Cellular Concrete is placed atop the EPS at a wet cast density of 38 lbs./ft^3.
LWC Deck Preparation:	After an overnight set, Celcore PVA Curing Compound is spray applied to the lightweight concrete at a rate of 0.33 gal./sq.
Primer: (Optional)	ASTM D 41 applied at a rate of 1 gal./sq., to top surface of any base or ply sheet prior to application of next layer.
Base Sheet:	One layer of Vented Base G (TG), Vented Base P (TG), Pika Ply SS-3G (TG)*, Pika Ply Base (TG)*, Pika Ply SS-3P (TG)*, Pika Ply 250 S (TG)*, Pika Ply 180 (SF) 3.5, torch-applied to primed lightweight concrete. *Requires torch-applied ply or cap membrane.
Ply Sheet: (Optional)	One or more layers of Pika Ply SS-3P (TG)*, Pika Ply 180 (SF) 3.5, Secure Ply, Pika Ply 250 S (TG)*, torch-applied. Or One or more layers of Pika Ply SS-3P or Pika Ply SS-4 adhered in hot asphalt at 25 lbs./sq. to sand surfaced base membrane. *Requires torch-applied cap membrane.
Membrane:	Solarflect (TG), Pika Ply MS-4 (TG), Pika Ply 250 GR FR (TG), torch-applied.
Surfacing:	Surfacing is Optional on granular surfaced field cap membranes. Surfacing is Required for smooth or sanded surfaced field cap membranes. Refer to Underwriters Laboratories or Intertek Testing Services listings for applicable fire classifications. Apply any coating listed in Table 4 above, or any Miami-Dade approved coating system.
Maximum Design Pressure:	-262.5 psf. (See General Limitation #9.)

LIGHTWEIGHT INSULATING CONCRETE SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine equivalent or enhanced fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117; calculations shall be signed and sealed by a Florida Registered Engineer, Architect, or Registered Roof Consultant.
2. For steel deck application where specific deck construction is not referenced: The deck shall be a minimum 22 gage attached with 5/8" puddle welds with weld washers at every flute with maximum deck spans of 5 ft. o.c.
3. For systems where specific lightweight insulating concrete is not referenced, the minimum design mix shall be a minimum of 300 psi.

GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance; refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt, panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each side lap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.
   Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.
5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. Insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant
   (When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).
   (When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE